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MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER HENEGHAN, MATTHEW E	
			ART UNIT 2134	PAPER NUMBER

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/397,503

Applicant(s)

AGGARWAL ET AL.

Examiner

Matthew Heneghan

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 7-53 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3,4,7-14,16-23 and 25-53 is/are rejected.  
7) ☒ Claim(s) 15 and 24 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. In response to the previous office action, Applicant has amended claims 1, 24, 26, 39, 42, and 50. Claims 1, 3, 4, and 7-53 have been examined.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1, 7, 16-18, and 46-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "is only essentially reproducible" in claim 1 is a relative term which renders the claim indefinite. The term "is only essentially reproducible " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear as to what degree of reproducibility would be encompassed by this limitation, especially in the case where something is entirely reproducible.

Regarding claim 16, the word "optional" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 7, 17, 18, and 46-51 depend from rejected claims 1 and 16, and include all the limitations of that claim, thereby rendering those dependent claims indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 Naccache et al., and in view of Patent No. 5,974,150, Kaish et al.

Regarding claim 34, Naccache discloses a method of preventing imitation of a smart card, said method comprising:

associating a number (identity data ID) reproducibly to said sample by using a specific reader (Naccache, fig. 2, element 23, col. 2, line 57-61); and

forming at least one coded version of said number, said at least one coded version being obtained by a public key signature (compute  $SIG(ID,p)$ , Naccache, col. 1, line 52, 55-56), and said version being recorded into an area of said object (record, Naccache, col. 2, line 53),

the ID and  $SIG(ID)$  are written to the card (Naccache, column 1, line 53),

but fail to show wherein said sample is subject to a degeneration such that said measurable characteristic may vary over time and an authenticity of said sample is determined by calculation whether a subsequent measurement of said

Art Unit: 2134

characteristic provides an associated number that is acceptably close to said initial reading; and

fail to show providing a sample of material obtainable only by at least one of chemical and physical processes such that a measurable characteristic of the sample is random and not reproducible;

However Kaish et al. teaches that authentication of object can be performed from a particular random or non-deterministic pattern or relation of the object, preferably deterministic pattern or relation of the object, may be measured as the characteristic (Kaish, col. 9, line 21-25). Furthermore, Kaish teaches an authentication device have adaptive capabilities to compensate for changes over time (Kaish, col. 10, line 41-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naccache as per teaching of Kaish to gain the benefit of obtaining a legal remedy in the case of simply copying said object (Kaish, col. 22, line 34-35).

Regarding claim 35, Naccache discloses show system for guaranteeing authenticity of an object, said method comprising:

means for forming at least one coded version of said initial associated number, said at least one coded version being obtained by a public key signature, (compute  $SIG(ID,p)$ , Naccache, col. 1, line 52, 55-56) and said at least one coded version and signature being recorded into an area of said object (Naccache, col. 1, line 53),

Art Unit: 2134

but fail to show a sample of material obtainable only by at least one of chemical and physical processes such that a measurable characteristic of the sample is random and not reproducible, said sample being placed on said object;

means for associating a number reproducibly to any said sample by using a specific reader, said specific reader providing an initial measurement of said characteristic and an initial associated number.

However Kaish et al. teaches that authentication of object can be performed from a particular random or non-deterministic pattern or relation of the object, preferably deterministic pattern or relation of the object, may be measured as the characteristic (sample random, Kaish, col. 9, line 21-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naccache as per teaching of Kaish to gain the benefit of obtaining a legal remedy in the case of simply copying said object (Kaish, col. 22, line 34-35).

Regarding claim 36, Naccache discloses show system for guaranteeing authenticity of an object, said method comprising:

means for forming at least one coded version of said initial associated number, said at least one coded version being obtained by a public key signature, (compute  $SIG(1D,p)$ , Naccache, col. 1, line 52, 55-56) and said at least one coded version and signature being recorded into an area of said object (Naccache, col. 1, line 53);

Art Unit: 2134

but fail to show a sample of material obtainable only by at least one of chemical and physical processes such that a measurable characteristic of the sample is random and not reproducible, said sample being placed on said object;

wherein said sample is subject to a degeneration such that said number may vary over time and an authenticity of said sample is determined by calculating whether a subsequent associated number is acceptably close to said recorded coded version;

However Kaish et al. teaches that authentication of object can be performed from a particular random or non-deterministic pattern or relation of the object, preferably deterministic pattern or relation of the object, may be measured as the characteristic (sample random, Kaish, col. 9, line 21-25). Furthermore, Kaish teaches authentication device that has adaptive capabilities to compensate for changes over time (degeneration, Kaish, col. 9, line 42-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naccache as per teaching of Kaish to gain the benefit of obtaining a legal remedy in the case of simply copying said object (Kaish, col. 22, line 34-35).

4. Claims 1, 3, 4, 7-9, 19-23, 25-33, 38-40, 42, 43, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. and in further view of Patent No. 6,543,685 Lien et al.

Art Unit: 2134

Regarding claims 1, 3, and 4, Naccache discloses a method of guaranteeing authenticity of an object comprising:

associating a number (identity data ID) reproducibly to said sample by using a specific reader (Naccache, fig. 2, element 23, col. 2, line 57-61); and

forming at least one coded version of said number, said at least one coded version being obtained by a key signature (compute  $SIG(1D, p)$ , Naccache, col. 1, line 52, 55-56),

wherein said object included at least one of a chip having a recording support, said chip positioned on said object (Naccache, col. 1, line 53), and another recording support, said method further comprising:

to allow for sample-reader combinations such that the number associated to said sample is only essentially reproducible, recording said number on said object card on said recording support on one of said chip;

but fails providing a sample of material obtainable only by at least one of chemical and physical processes such that a measurable characteristic of said sample is random and not reproducible, and to show another recording support;

However Kaish et al. teaches that authentication of object can be performed from a particular random or non-deterministic pattern or relation of the object, preferably deterministic pattern or relation of the object, may be measured as the characteristic (sample random, Kaish, col. 9, line 21-25); and Lien et al. teaches a card encoder where one or both of the stations (recording support) needed to encoding a chip on a smart card or for adding magnetic information on



Art Unit: 2134

the magnetic strip (another recording support may be provided) (Lien, col. 1, line 36-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naccache as per teaching of Kaish and Lien to gain the benefit of obtaining a legal remedy in the case of simply copying said object (Kaish, col. 22, line 34-35) and encoding a magnetic strip on the card and adding a program into an embedded chip for "smart card" status (Lien, col. 1, line 16-18).

Regarding claims 33 and 39, the ID and SIG(ID) are written to the card (Naccache, column 1, line 53). Kaish further discloses the writing of an encrypted representation of the material onto the sample (see Kaish, column 26, lines 21-24).

As per claims 7 and 42, Naccache also discloses a reader for reading the object (see column 2, lines 56-64), public-key cryptography (see column 2, line 3), and information would be written to both recording supports.

Regarding claim 8, it is well-known in the art that some types of suitable readers, such as the magnetic-inductance reader disclosed by Naccache (see column 2, lines 9-10) have some variability in their readings due to noise; therefore, there is some variance in sequential readings. Naccache discloses an RSA signature scheme (see column 2, line 67) that outputs much less information than is input.

Art Unit: 2134

Regarding claims 9 and 22, the RSA signature scheme disclosed is a public-key hash function to be used on the reading taken. Private keys are part of a public key scheme.

Regarding claims 26-29 and 47, Naccache and Lien do not disclose the use of materials that decay over time or that it be selectively changeable.

Kaish discloses the use of materials that decay over time (see Kaish, column 15, lines 16-29), and further suggests that this would compel expedited examination of suspect goods.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Naccache by using materials that vary with time, as disclosed by Kaish, as this would compel expedited examination of suspect goods.

Regarding claim 19, the invention in view of Kaish may be used on instruments that are made of paper, such as banknotes (see Kaish, column 10, lines 14-27).

Regarding claims 20, 21, and 30, the signatures are computed (precomputed) dynamically before being applied to the certificate.

Regarding claim 23, a scanner is used (see Naccache, column 2, line 57).

Regarding claim 25, optional data, such as a password, may be used in the signature (see Naccache, column 3, lines 1-10)

Regarding claims 31 and 32, Naccache and Kaish and Lien further show wherein said forming at least one coded version of said number further comprises using additional information for said forming said coded version,

Art Unit: 2134

wherein said additional information comprises the date of issue of said object (copyright text (date), Kaish, col. 22, line 31-33).

Regarding claim 37, the date of manufacture may also be in the coded version (see Kaish, column 16, lines

Regarding claim 38, Naccache and Kaish and Lien claim 1 above, and further show said forming at least one coded version of said number further comprises using additional information for said forming said coded version, wherein said additional information comprises the functionality of an application of said object (product identification (functionality), Kaish, col. 22, line 31-33).

Regarding claims 40 and 43, the ID is combined with a random pattern (further information) before encryption.

5. Claims 41, 44, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as applied to claims 39 and 42 above, and further in view of U.S. Patent No. 6,131,090 to Basso, Jr. et al.

Naccache, Kaish, and Lien do not disclose more than one encrypting of a number on a smartcard.

Basso discloses the repeated encryption of a number on a smartcard, making it usable in conjunction with a trusted authority (see abstract), and suggests that this arrangement helps to allow for security against unauthorized access even if the owner cannot supply the key (see column 2, line 16-24).

Art Unit: 2134

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Naccache, Kaish, and Lien by repeatedly encrypting data on a smartcard, as disclosed by Basso, as this arrangement helps to allow for security against unauthorized access even if the owner cannot supply the key.

6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as applied to claim 39 above, and further in view of U.S. Patent No. 5,257,389 to Liu et al.

Naccache, Kaish, and Lien do not disclose the recording of data in base 3.

Liu discloses the writing of readings in as 1, -1, or 0 (i.e. a base 3 equivalent) and suggests that this leads to an acceleration of input product convergence (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Naccache, Kaish, and Lien by storing numbers in base 3, as disclosed by Liu, as this leads to an acceleration of input product convergence.

7. Claims 10-13 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as

Art Unit: 2134

applied to claims 1, 8, and 9 above, and further in view of U.S. Patent No. 6,297,888 to Noyes et al.

Regarding claims 10, 12, and 46, Though Kaish discloses the use of an averaging algorithm to decrease the effects of noise (see Kaish, column 24, lines 10-25) and a tolerance of end results inside a certain threshold (see Kaish, column 27, line 57 to column 28, line 6), Naccache, Kaish, and Lien do not disclose the dropping of readings outside a certain range.

Noyes discloses the averaging of a set of readings and the dropping of readings on the edge of a region, to reduce the effects of noise (see column 10, lines 57-64).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Naccache, Kaish, and Lien by averaging of a set of readings and the dropping of readings on the edge of a region, as disclosed by Noyes, to reduce the effects of noise.

Regarding claims 11 and 13, Naccache discloses a public-key algorithm to verify the user's ID (see column 2, lines 67-68). This result is the basis for accepting a card.

8. Claims 14, 37, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as applied to claims 1 and 39 above, and further in view of U.S. Patent No. 6,155,605 to Bratchley et al.

Art Unit: 2134

Regarding claim 14, Naccache, Kaish, and Lien do not disclose the sensing of degeneration of a sample.

Bratchley discloses the reading of emission decay characteristics in a sample (see column 6, line 34), and further notes that such a characteristic is one of a high-security entity (see column 6, lines 8-9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Naccache, Kaish, and Lien by detecting the emission decay, as disclosed by Bratchley, as such a characteristic is one of a high-security entity.

Regarding claims 37 and 49, Kaish also discloses a date being placed on the label (see Kaish, column 27, line 27), which is a type of timestamp. Decay can over be measured over time, and Bratchley does not disclose the means by which this would be done; therefore, a predictable decay could be measured using that timestamp.

9. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as applied to claim 1 above, and further in view of U.S. Patent No. 6,233,339 to Kawano et al.

Naccache, Kaish, and Lien do not suggest that the change in readings should be used to detect the altering of a container.

Art Unit: 2134

Kawano discloses a system wherein changes in pressure, caused by a piercing of the container, can be used to detect tampering (see column 10, lines 49-61).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Naccache, Kaish, and Lien by detecting changes in pressure, as disclosed by Kawano, in order to detect tampering.

10. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 5,434,917 to Naccache et al., and in view of Patent No. 5,974,150 to Kaish et al. further in view of Patent No. 6,543,685 Lien et al. as applied to claim 1 above, and further in view of U.S. Patent No. 3,795,805 to Swanberg et al.

Naccache does not disclose the dividing of the card into regions.

Kaish further discloses the dividing of the label into regions, thereby making the data and the medium selectively changeable (see column 28, lines 7-43), thus allowing for the avoidance of having to encrypt the entire certificate.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Naccache by using materials that vary with time and are divided in regions, as disclosed by Kaish, as this would allow for the avoidance of having to encrypt the entire certificate.

Naccache, Kaish, and Lien do not disclose support for destroying a portion of being destroyed by a reader to make a payment.

Art Unit: 2134

Swanberg disclose the use of cards in the commuter transportation industry, wherein a reader (the attendant) punches the card when it is used, thus destroying one of the objects on the card. This allows for the offering of reduced rate multiple ride cards (see column 1, lines 5-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Naccache, Kaish, and Lien by issuing cards for a reader to punch when it is used, as disclosed by Swanberg, as this allows for the offering of reduced rate multiple ride cards.

***Allowable Subject Matter***

11. Claims 15 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 16-18 and 50 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

Claims 15-18 and 50 would be allowable for the reasons stated in the previous office action.



Art Unit: 2134

Claim 24 would be allowable based upon the fact that none of the references cited employ a detection scheme that monitors the exposed face of a mineral or glass sample.

### ***Response to Arguments***

14. Regarding the rejection of claim 1 under 35 U.S.C. 112, second paragraph, Applicant's arguments filed 22 April 2005 have been fully considered but they are not persuasive. The section of the specification to which Applicant has referenced in attempting to clarify the term discusses fuzzy logic, but does not further define the term "only essentially reproducible."

15. Regarding the rejections of the claims under 35 U.S.C. 103, Applicant's arguments filed 22 April 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the use of the same reader) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Since the claims as written do not recite a determination of which reader is a specific reader, it must be assumed that *any* reader is a specific reader. The

Art Unit: 2134

number p, which is derived by the reader from examining the sample, is stored by way of a public key signature. No limitation dictates that it also must be stored alone. The claims are therefore anticipated.

Regarding Applicant's argument that Naccache teaches away from smart-cards (see Remarks, p. 22), it is noted that Naccache's invention comprises a chip, and that it is read using a smart-card reader (see column 2, lines 56-62). It therefore constitutes a smart-card.

Regarding Applicant's argument that Naccache's invention is such a perfectly-functioning system that it would preclude any further improvement not suggested by Naccache, it is noted that disclosures upon which patents are granted are not presumed to be perfect; modifications that one skilled in the art would be motivated to make in view of another reference or references must therefore be considered when evaluating the patentability of an invention under 35 U.S.C. 103. There is no reason to believe that the replacement of Naccache's embedded steel marbles with Kaish's embedded decaying materials would render the invention inoperative, given that Kaish discloses the embedding of such materials in a variety of materials, including items such as a compact disc (see Kaish, column 27, lines 13-14); moreover, Kaish has supplied sufficient motivation to make such a change.

Regarding Applicant's argument that the motivation for incorporating the teachings of Kaish into Naccache's invention (the prevention of simply copying an object) is insufficient, there is no reason to believe that Naccache's invention would be completely immune to duplication using a copying system having three-

Art Unit: 2134

dimensional imaging. One skilled in the art would recognize that the use of Kaish's degenerative materials would frustrate such a scheme.

Regarding claim 8, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Naccache sufficiently teaches to claim 8 as it is currently phrased.

Regarding the arguments with regard to the rejection of claim 14 (see Remarks, p. 25), it has already been stated by the Office that Naccache and Kaish do not teach to the sensing of degeneration; it is for this reason that the rejection of claim 14 has also been made in view of Bratchley.

Regarding the rejection of claim 19, the invention of Naccache and Kaish comprises a plurality of materials; since Kaish discloses the use of paper, one such material may thus be paper.

Regarding the rejections of claims 21 and 30, most computations made by a computer, including the computations of initial values are performed dynamically.

Regarding claim 32, Kaish discloses several different sets of numbers that may be included, thus constituting at least a plurality.

Regarding claim 33, all of the limitations are addressed, as discussed above.

Art Unit: 2134

Regarding claim 42, the term "statistical method" is being treated as being "a method that gathers a statistic." The reading of data in Naccache's invention does this.

Regarding claim 47, the spurious grounds of rejection have been removed.

Regarding claims 10-13 and 46, in response to applicant's argument that Noyes is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, noise is a common problem in electrical circuitry, even in circuits that are measuring fixed objects. The technique of taking several samples in order to compensate for noise-related distortions of readings is used throughout the electrical arts, and applies to the problem of the instant invention.

Regarding claims 14 and 49, the only additional limitations in the use of degenerative matter in the sample. Bratchley teaches the use of such matter in materials, as is clearly doing so in order to be able to later determine the age of the sample for the purposes of authentication. Though Naccache's preferred embodiment uses steel marbles, the modification of Naccache in view of Kaish allows for a wider variety of materials.

Art Unit: 2134

Regarding claim 48, though Kawano discusses the piercing of the container, any action that physically breaks the seal of the compartment would allow for the detection of tampering.

Regarding claim 51, Applicant is reminded that the modification disclosed by Swanberg is not being applied to Naccache's invention alone, but rather to Naccache's invention as already modified by Kaish. The invention of Naccache is already divided into zones as described above, and Swanberg's further modification may therefore be used without destroying the combined invention.

16. Applicant's arguments, see Remarks, filed 22 April 2005, with respect to the rejection of claim 37 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the art cited above.

### ***Conclusion***

17. Due to the new grounds of rejection presented, this action is non-final.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,309,690 to Brogger et al. discloses the use of particles applied to a surface to enable authentication.

Art Unit: 2134

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached at (571) 272-3838.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(571) 273-3800.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

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Art Unit: 2134

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July 15, 2005

David Y. Jung  
Primary Examiner

*D.Y. Jung*  
*7/24/05*